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EXAMINER

WINDER, P

ART UNIT PAPER NUMBER

2155

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks





Office Action Summary

Application No. 09/005,479

No. Applicaπ(s)

Levergood et al.

Examiner

Patrice L. Winder

Group Art Unit 2155



X Responsive to communication(s) filed on <u>Jun 24, 2000</u>	
☐ This action is FINAL.	
☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayy035 C.D. 11; 453 O.G. 213.	
A shortened statutory period for response to this action is set to expire3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).	
Disposition of Claim	
X Claim(s) <u>3, 5-26, 31-43, 49-63, 67-93, and 96-107</u>	is/are pending in the applicat
Of the above, claim(s)	_ is/are withdrawn from consideration
☐ Claim(s)	is/are allowed.
X Claim(s) 3, 5-26, 31-43, 49-63, 67-93, 96-98, and 100-106	is/are rejected.
	is/are objected to.
☐ Claims are subject	t to restriction or election requirement.
Application Papers	
☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.	
☐ The drawing(s) filed on is/are objected to by the Examiner.	
☐ The proposed drawing correction, filed on is ☐ approved	_disapproved.
☐ The specification is objected to by the Examiner.	
☐ The oath or declaration is objected to by the Examiner.	•
Priority under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d). All Some* None of the CERTIFIED copies of the priority documents have been	
☐ received.	
received in Application No. (Series Code/Serial Number)	
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).	
*Certified copies not received:	
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).	
Attachment(s) ☒ Notice of References Cited, PTO-892 ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s)	
SEE OFFICE ACTION ON THE FOLLOWING PAGES	

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DETAILED ACTION

1. Claims 3, 5-26, 31-43, 49-63, 67-93 and 96-107 are pending.

2. A collective statement of motivation for combination concludes each section of the rejection.

Claim Rejections - 35 USC § 103

- 3. The text of those sections of Title 35, U.S. Code 103(a) not included in this action can be found in a prior Office action.
- 4. Claims 3, 5-6, 13-14, 23, 25, 31-32, 35-38, 49-54, 56-62, 67-74, 77, 79-85, 87-93, 101-102, 104 and 106 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bjorn N. Freeman-Benson, "Using the Web to Provide Private Information -or- A Short Paper About Password Protection Without Client Modifications" (hereafter referred to as Freeman-Benson) in view of Johnson et al., U.S. Patent No. 5,560,008 (hereafter referred to as Johnson).
- 5. Regarding claim 3, Freeman-Benson taught a method of processing service requests from a client to a server system through a network comprising:

forwarding a service request from the client to the server system, wherein the communications between the client and server system are according to hypertext transport protocol (para 11, pgs 2-3);

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returning a session identifier from the server system to the client (returning specialized URL, para 16, pg 3); and

the session identifier appended to subsequent service requests from the client to the server system within a session of requests (paras 12, 16, pg 3).

Freeman-Benson does not specifically teach appending a session identifier to service requests. However, Johnson taught appending a session identifier to subsequent service requests (col. 5, line 66 - col. 6, line 2, inserting following each request, col.9, lines 33-39).

- 6. Regarding dependent claim 5, Johnson taught the session identifier (credential id) includes a user identifier (col. 5, lines 56-60).
- Regarding dependent claim 6, Freeman-Benson does not specifically disclose wherein the session identifier (credential id) includes an expiration time for the session. However, Johnson does disclose that the authentication is valid within an expiration time (col. 6, lines 38-43, 51-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the expiration time in the session id because doing so would improve efficiency by not requiring the server to request the expiration time before validating the session identifier (credential id).
- 8. Regarding dependent claim 13, Johnson taught the server system assigns the session identifier (credential id) to an initial service request to the server system (if credential id not included in request, col. 6, lines 11-14, 31-34).

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9. Regarding dependent claim 14, Johnson taught the server system subjects the client to an authorization routine prior to issuing the session identifier (credential id) and the session identifier (credential id) is protected from forgery (col. 6, lines 31-36, 47-50).

- 10. Regarding dependent claim 23, Johnson the access rights of the client are fully contained within the session identifier (col. 8, lines 32-38).
- 11. Regarding dependent claim 25, Freeman-Benson taught a service request is for a document which has been purchased by the user (access to the private database is purchased, paragraph 2). Johnson taught the session identifier comprises an authorization identifier (privilege field), and further comprising:

returning the requested document if the authorization identifier indicates that the user is authorized to access the document (col. 8, lines 15-22).

12. Regarding dependent claim 31, Freeman -Benson taught at least one service request comprises a document request for a document (search request, para 11, pg 2) which has been purchased by a user (user charged for access to private database, para 2, pg 1). Johnson taught the steps of:

appending an authorization identifier to the request (inserting credential id including privilege field, col.5, line 66 - col. 6, line 2, col. 9, lines 33-39); and

returning the requested document if the authorization identifier indicates the user is authorized to access the document (col. 7, lines 46-53, col. 8, lines 18-22).

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13. Regarding dependent claim 32, Johnson taught the authorization identifier is encoded within a session identifier which is appended to the requested (col. 9, lines 6-16).

14. Regarding claim 35, Freeman-Benson taught an information system on a network, comprising:

means for receiving service requests from client and for determining whether a service request includes a session identifier wherein communications to and from the clients are according to hypertext transfer protocol (para 19, pg 4);

means for providing the session identifier in response to an initial service request in a session of requests (para 11, pgs 2-3); and

means for providing the session identifier in response to an initial service request in a session of requests (para 12, pg 3); and

means for servicing service request from a client which include the session identifier (paras 20-21, pg 4). Freeman-Benson does not specifically teach subsequent service request being processed in the session. However, Johnson taught subsequent service request being processed in the session (col. 6, lines 41-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Johnson's subsequent service request being processed in the session in Freeman-Benson's system for accessing a private web database would have improved system efficiency. The motivation would have been to enable the web server to limit the validity of the session identifier to a length of time, i.e. corresponding to a session, and thereby improve system security.

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15. Regarding dependent claim 36, Johnson taught the access rights of the client are fully contained within the session identifier (col. 8, lines 32-38).

- 16. Regarding dependent claim 37, Freeman-Benson taught the means for providing the session identifier is in a server system which services the requests (para 11, pgs 2-3, web server in system with several nodes, paras 19-21, pg 4).
- 17. Regarding dependent claim 49, Freeman-Benson taught the session identifier is cryptographically generated (encrypted version of login name and password appended to URL, para 9, pg 2).
- 18. Regarding dependent claim 50, Johnson taught further comprising: returning a REDIRECT to the client (client authentication agent constructs credentials), the REDIRECT including a locator for an authentication server (redirect the client request to authentication agent), the authentication server providing the session identifier (authentication agent of server providing credential id, col. 9, lines 45-52).
- 19. Regarding dependent claim 51, Freeman-Benson taught wherein the session identifier is appended to at least one path name in a document returned by the server system (encrypted version of login name and password appended to URL, para 9, pg 2).
- 20. Regarding dependent claim 52, Freeman-Benson taught the at least one path name is a link in the returned document (appended to URL, para 8, pg 2).
- 21. Regarding dependent claim 53, Freeman-Benson taught the link is an absolute link (URL with designated path name, para 8, pg. 2).

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22. Regarding dependent claim 54, Freeman-Benson taught the link comprises a uniform resource locator (special URL, para 9, pg 2).

- 23. Regarding dependent claim 56, Freeman-Benson taught the session identifier is cryptographically generated (encrypted version of login name and password appended to URL, para 9, pg 2).
- 24. Regarding dependent claim 57, Johnson taught the session identifier is directed to an accessible domain (group set field, col. 8, lines 14-15).
- 25. Regarding dependent claim 58, Freeman-Benson does not specifically disclose wherein the session identifier (credential id) includes an expiration time for the session. However, Johnson does disclose that the authentication is valid within an expiration time (col. 6, lines 38-43, 51-54). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include the expiration time in the session id because doing so would improve efficiency by not requiring the server to request the expiration time before validating the session identifier (credential id).
- 26. Regarding dependent claim 59, Johnson taught the session identifier comprises a date (col. 6, lines 41-45).
- 27. Regarding dependent claim 60, Johnson taught the session identifier comprises a key identifier (index, col. 8, lines 8-9).
- 28. Regarding dependent claim 61, Johnson taught the session identifier comprises an address of the client (location of user in group id, col. 8, lines 11-12).

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29. Regarding dependent claim 62, Johnson taught the session identifier comprises an unforgeable digital signature (col. 9, lines 16-20).

30. Regarding dependent claim 67, Freeman-Benson taught the session identifier is designated by the server system (session identifier returned in link, para 11, pgs 2-3), further comprising the steps of:

validating, at the server system, the appended session identifier (KeyVerifierNode validating encrypted portion of special URL, para 21, pg 4);

returning a controlled document if the appended session identifier is valid (returning the document, para 19, pg 4).

31. Regarding claim 79, Freeman-Benson taught a method of processing service requests from a client to a server system through a network,

forwarding the service request from the client to the server system, wherein the communications between the client and server system are according to hypertext transfer protocol (para 11, pgs 2-3);

returning a session identifier from the server system to the client (returning specialized URL, para 16, pg 3);

appended as part of a path name in a uniform resource locator the session identifier to subsequent service requests from the client to the service system within a session requests (paras 12,16, pg 3).

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Freeman-Benson does not specifically teach appended as part of a path name in a uniform resource locator the session identifier to subsequent service requests. However, Johnson taught appending the session identifier to subsequent service requests (col. 5, line 66 - col. 6, line 2, inserting, col. 9, lines 33-39).

- 32. Regarding dependent claim 101, Johnson taught the session identifier is appended by the client (col. 9, lines 33-39).
- 33. Regarding dependent claim 102, Freeman-Benson taught the session identifier is cryptographically generated (encrypted version of login name and password appended to URL, para 9, pg 2).
- 34. Regarding dependent claim 104, Freeman-Benson taught the document is returned electronically (inherent, web server returning document requested by URL, para 19, pg 4).
- 35. Regarding dependent claim 106, Freeman-Benson taught the authorization identifier is appended to a uniform resource locator (specialized URL, para 8, pg. 2).
- 36. Regarding the motivation for claims 1 and 79, it would have been obvious to one of ordinary skill in the art at the time the invention was made that substituting Johnson's appending a session identifier to subsequent request in Freeman-Benson's system for accessing a private web database would have improved system effectiveness. The motivation would have been to improve upon Freeman-Benson method of authentication by incorporating authorization.

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37. Claims 7-12, 24-26, 33-34, 39-43, 55, 76, 78 and 86 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman-Benson and Johnson further in view of Filepp et al., U.S. Patent No. 5,347,632 (hereafter referred to as Filepp).

- 38. Regarding dependent claim 7, Freeman-Benson does not specifically teach the server system recording a transaction log. However, Filepp taught a method wherein the server system records information in a transaction log in the server system (col. 9, lines 38-44).
- 39. Regarding dependent claim 8, Freeman-Benson does not specifically teach the server tracking the access history of the session. However, Filepp taught a server system that tracks the access history of sequences of service requests within a session of requests (col. 9, lines 38-44).
- 40. Regarding dependent claim 9, Freeman-Benson does not specifically teach the server system tracking the access history to determine requests leading to purchases. However, Filepp taught the server system tracking the access history to determine requests leading to purchases (col. 93, lines 27-43).
- 41. Regarding dependent claim 10, Freeman-Benson does not specifically teach a server system counting the requests. However, Filepp taught a server system counts requests to particular services exclusive of repeated requests from a common client (col. 9, lines 41-44).
- 42. Regarding dependent claim 11, Freeman-Benson does not specifically teach a database relating customer information to access patterns. However, Filepp taught the server system maintains a database relating customer information to access patterns (col. 93, lines 28-43).

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43. As per dependent 12, Freeman-Benson does not specifically teach information that includes customer demographics. However, Filepp taught wherein the information includes customer demographics (col. 9, lines 38-44).

44. Regarding dependent claim 24, Johnson taught a service request is for a document (request to open a file) and the session identifier includes a user identification (user id, col. 8, lines 10-11), further comprising:

returning the requested document wherein the document (returning an opened file, col. 7, lines 46-53). Johnson does not specifically teach the document is customized for a particular user based on the user identification of the session identifier. However, Filepp taught the document is customized for a particular user based on the user identification of the session identifier (col. 9, lines 38-44).

45. Regarding dependent claim 26, Johnson taught a service request is for a document (request to open a file) wherein the session identifier comprises a user identifier (user id, col. 8, 10-11), further comprising:

returning the requested document to the client (receiving open file, col. 7, lines 46-53).

Johnson does not specifically teach charging the user identified in the identifier for access to the document. However, Filepp taught charging the user identified in the identifier for access to the document (col. 6, lines 57-61).

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46. Regarding dependent claim 33, Johnson taught at least one service request comprises a request for a document (request to open file), wherein the session identifier is designated by the server system (credential id specified by server system), said method comprising:

returning the requested document to the client (col. 5, lines 66 - col. 6, line 2).

Johnson does not specifically teach charging the user identified in the session identifier for access to the document. However, Filepp taught charging the user identified in the session identifier for access to the document (col. 6, lines 57-61).

- 47. Regarding dependent claim 34, Johnson taught a user identifier is encoded within a session identifier which is appended to the request (user id, col. 8, lines 10-11, inserted following request, col. 9, lines 33-39).
- 48. Regarding dependent claim 55, Johnson does not specifically teach the step of appending the session identifier comprises filtering the requested document. However, Filepp taught filtering the requested document (filtering by customizing the document, col. 9, lines 38-44)
- 49. Regarding dependent claim 76, Freeman-Benson does not specifically teach the document is customized for a particular based on user identification of the session identifier.

 However, Filepp taught the document is customized for a particular based on user identification of the session identifier (col. 9, lines 38-44).
- 50. Regarding claims 7, 10-11, 24, 26, 33, 39-42, 55, 76, 78, 86, it would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Filepp's tracking methodology in Freeman-Benson's system for accessing a private web database would

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have improved system utility. The motivation would have been to increase the marketability and flexibility of Freeman-Benson's system by enabling the service providers to be more responsive to clients.

- 51. Claims 15- 21, 63 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman-Benson and Johnson further in view of Cheng et al., U.S. Patent No. 5,544,322 (hereafter referred to as Cheng).
- 52. Regarding dependent claim 15, Freeman-Benson does not specifically teach plural servers. However, Cheng taught plural servers including an authentication server which provides session identifier (credential id)s for service requests to multiple servers (Figure 2, col. 5).
- 53. Regarding dependent claim 16, Johnson taught a method wherein a client directs a service request to a first server which is to provide the requested service;

the first server checks the service request for a session identifier (credential id) and only services a request having a valid session identifier (credential id),

and where the service request has no valid identifier, the first server redirects the service request from the client to the authorization server (authentication agent);

the authorization server (authentication agent) subjects the client to the authorization routine and issues the session identifier (credential id) to be appended to the service request to the first server;

the client forwards the service request appended with the session identifier (credential id) to the first server;

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the first server recognizes the session identifier (credential id) and services the service request to the client; and,

the client appends the session identifier (credential id) to subsequent service requests to the server system and is serviced without further authorization. Benson does not specifically teach an authorization server. However, Cheng taught a client, a first server, and an authorization server (Figure 2, col. 5).

- 54. Regarding dependent claim 17, Johnson taught a method wherein the session identifier (credential id) includes a user identifier (col. 5, lines 56-60).
- Regarding dependent claim 18, Johnson taught the session identifier (credential id) has an expiration time. Johnson does not disclose the session identifier (credential id) includes an expiration time for the session. However, it would have been obvious to one of ordinary skill in the art to incorporate an expiration time for the session in session identifier (credential id) because including the expiration time in the session identifier (credential id) would increase efficiency by not requiring the server to request the expiration time before validating an authorization.
- 56. Regarding dependent claim 19, Johnson taught the session identifier (credential id) provides access to a protected domain to which the session has access authorization (col. 13, lines 37-40).
- 57. Regarding dependent claim 20, Johnson taught the session identifier is modified for access to a different protected domain (col. 8, lines 32-38).

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- 58. Regarding dependent claim 21, Johnson taught the session identifier (credential id) provides a key identifier for key management (col. 5, lines 56-60).
- 59. Regarding dependent claim 63, Freeman-Benson does not specifically teach the authorization identifier is provided by an authentication server. However, Cheng taught the authorization identifier is provided by an authentication server (col. 5, lines 31-34, 36-39).
- 60. Regarding dependent claim 75, Freeman-Benson does not specifically teach the session identifier facilitates authenticated accesses across multiple servers. However, Cheng taught the session identifier facilitates authenticated accesses across multiple servers (Figure 2, col. 5).
- Regarding claims, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Cheng's multiple server system in Freeman-Benson's system for accessing a private web database because doing so would have increased system utility. The motivation would have been to increase flexibility by enabling the service providers to authorize more clients to access protected domains.
- 62. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman-Benson, Johnson and Cheng further in view of Filepp.
- 63. Regarding dependent claim 22, Freeman-Benson does not specifically teach a transaction log in the server system. However, Filepp taught a method wherein the server system records information from the session identifier (credential id) in a transaction log in the server system (col. 9, lines 38-44). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Filepp's tracking methodology in Freeman-Benson's

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system for accessing a private web database would have improved system utility. The motivation would have been to increase the marketability and flexibility of Freeman-Benson's system by enabling the service providers to be more responsive to clients.

- 64. Claims 96-98, 100, 103 and 105 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman-Benson in view of Dedrick, U.S. Patent No. 5,768,521 (hereafter referred to as Dedrick).
- 65. Regarding dependent claim 96, Freeman-Benson does not specifically teach how a user is charged. However, Dedrick taught servicing a request (col. 3, lines 50-56); and automatically charging a user identified by the session identifier for the service provided (col. 3, lines 60-63).
- 66. Regarding dependent claim 97, Freeman-Benson does not specifically teach how a user makes a purchase request. However, Dedrick taught at least one service request comprises a purchase request (review of the request indicates the user is not a subscriber), the purchase request including an associated user identifier (request includes information identifying whether the user is a subscriber), the method further comprising:

accessing, upon receipt of the purchase request at the server system, user information associated with the user identifier sufficient to charge an account associated with the user the purchase price of the product identified by the purchase request (col. 3, lines 31-41, 60-63);

charging the user for the product identified by the purchase request according to the user information (col. 7, lines 29-35); and

fulfilling the purchase request based on the user information (col. 7, lines 35-37).

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67. Regarding dependent claim 98, Johnson taught the client includes the user identifier in a session identifier (user id, col. 8, lines 11-12). Freeman-Johnson taught the session identifier appended to the purchase request (request to purchase private information para 2, pg.).

68. Regarding dependent claim 100, Freeman-Benson does not specifically teach how the user makes a purchasing request. However, Dedrick taught under control of a client system,

displaying information identifying a product (col. 7, lines 18-23); and

under the control of the server system,

in response to a user selection of a hyperlink (inherent, information distributed according to hypertext markup language, col. 4, lines 36-38) associated with a product desired to be purchased, sending a request to purchase the item along with an identifier of a purchaser of the item to a server system (id whether client is a subscriber, col. 7, lines 18-26); and

upon receiving the request, retrieving additional information previously stored for the purchaser identified by the identifier in the received request (retrieving profile containing account information, col. 3, lines 31-41, 60-63);

charging the user the purchase price of the product (metering server debits the user account, col. 7, lines 32-37); and

fulfilling the request for the product (sending information, col. 7, lines 32-37).

69. Regarding dependent claim 103, Freeman-Benson does not specifically teach how a user is charged. However, Dedrick taught identifying the user from the authorization identifier (identifying subscriber authorization, col. 3, lines 50-56); and

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automatically charging the identified user for the document (col. 3, lines 60-63).

70. Regarding dependent claim 105, Freeman-Benson does not specifically teach a physical copy of the document is sent. However, Dedrick taught a physical copy of the document is sent (through the purchasing options the user is able to retrieve requested information by printing, i.e. physical copy, col. 3, lines 25-27).

Regarding claims 96, 97, 100, 103, 105, it would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Dedrick's metering mechanisms for charging users for electronic information in Freeman-Benson's system for accessing a private web database would have improved system effectiveness. The motivation would have to provide a mechanism to allow a system to automatically debit and bill a user for consuming requested electronic information from the web database (Dedrick, col. 1, lines 54-56).

Statements concerning the remaining claims

- 72. The language of claims 38-43 is substantially equivalent to the language of previously rejected claims 14, 7-8, 10-12. Therefore, claims 38-43 are rejected on the same rationale as claims 14, 7-8, 10-12, respectively.
- 73. The language of claims 68 -74 is substantially equivalent to the language of previously rejected claims 56-62. Therefore, claims 68-74 are rejected on the same rationale as claims 56-62, respectively.

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74. The language of claims 77-78 is substantially equivalent to the language of previously

rejected claims 51 and 55. Therefore, claims 77-78 are rejected on the same rationale as claims

51 and 55, respectively.

75. The language of claims 80-93 is substantially equivalent to the language of previously

rejected claims 49-62. Therefore, claims 80-93 are rejected on the same rationale as claims 49-

62, respectively.

Allowable Subject Matter

76. Claims 99 and 107 are objected to as being dependent upon a rejected base claim, but

would be allowable if rewritten in independent form including all of the limitations of the base

claim and any intervening claims.

77. The following is a statement of reasons for the indication of allowable subject matter:

Claims 99 and 107 are objected to because the prior art of record fails to teach or suggest

including a user identifier in a cookie or appending an authorization identifier to a cookie.

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78. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is (703) 305-3938. The examiner can normally be reached on Monday-Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached on (703) 305-9648. The fax phone number for this Group is (703) 308-9052.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Patrice Winder Patent Examiner Art Unit 2155